

CALIFORNIA WILDLIFE HABITAT RELATIONSHIPS SYSTEM
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B127 American Kestrel *Falco sparverius*
Family: Falconidae Order: Falconiformes Class: Aves

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DISTRIBUTION, ABUNDANCE, AND SEASONALITY

Common resident throughout California, wintering in all habitats except high elevations. Also a winter migrant. Fairly common on Channel Islands. Occurs in most open habitats, in a variety of shrub and early successional forest habitats, in forest openings, and various ecotones.

SPECIFIC HABITAT REQUIREMENTS

Feeding: Takes small mammals, birds, insects, earthworms, reptiles, and amphibians. Perches and pounces, pounces from a hover, or catches flying insects. Rarely pursues prey on wing. Caches prey near nest in cracks in trees or rocks (Collopy 1973). Perch may be tree, snag, rock, utility pole or wire, fence post (Grinnell and Miller 1944). Forages in open habitats.

Cover: Seeks cover in a variety of cavities in trees, snags, rocky areas, banks, and buildings.

Reproduction: Nests in cavities in trees, snags, rock crevices, cliffs, banks, and buildings. Bent (1938) reported nests in cavities in sycamores, willows, and cottonwoods. Does not construct a stick nest. Often uses cavities excavated by northern flickers and Lewis' woodpeckers. In Oregon, Thomas (1979) estimated that the minimum dbh tree required by these 2 woodpeckers was 31 cm (12 in) and 38 cm (15 in), respectively.

Water: Drinks water in captivity (Roest 1957). Has a high tolerance to heat and aridity.

Pattern: Forages in open and partially open areas of most habitats. Needs cavities near foraging areas.

SPECIES LIFE HISTORY

Activity Patterns: Yearlong, diurnal activity.

Seasonal Movements/Migration: At higher elevations, moves downslope for winter and upslope for summer. Individuals from north migrate into California for winter (Grinnell and Miller 1944). Residents often maintain pair bond throughout the year.

Home Range: Prebreeding home range twice as large as breeding home range on the east side of the Sierra Nevada (Balgooyen 1976). At various other locations, winter home ranges varied from 154-452 ha (380-1117 ac) (Enderson 1960, Mills 1976).

Territory: Balgooyen (1976) reported that 32 territories averaged 109 ha (270 ac). In the

Los Angeles area, Cade (1955) reported that defended territories averaged 10 ha (25 ac). In various locations, summer breeding territories varied from 78-399 ha (192-987 ac) (Enderson 1960, Mills 1976).

Reproduction: Breeds from early April to August, with peak activity May and June. Eggs laid mid-May to late June. Average clutch size 4-5, range 3-7. Incubation 28-31 days; young fledge after 29-31 days.

Niche: May be preyed upon by larger raptors. Balgooyen (1976) suggested that tree squirrels may destroy nests. May compete with other cavity nesters: woodpeckers, starlings, owls, bluebirds, nuthatches, chipmunks, squirrels. Female larger than male, allowing pair to partition food resources more effectively. Ectoparasites include lice, black flies (Roest 1957), calliphorid flies, and milichiid flies (Balgooyen 1976).

REFERENCES

- Balgooyen, T. G. 1976. Behavior and ecology of American kestrel (*Falco sparverius* L.) in the Sierra Nevada of California. *Univ. Calif. Publ. Zool.* 103:1-87.
- Bent, A. C. 1938. Life histories of North American birds of prey. Part 2. *U.S. Natl. Mus. Bull.* 170. 482pp.
- Cade, T. J. 1955. Experiments on winter territoriality of the American kestrel (*Falco sparverius*). *Wilson Bull.* 67:5-17.
- Collopy, M. W. 1973. Predatory efficiency of American kestrels wintering in northwestern California. *Raptor Res.* 7:25-31.
- Enderson, J. H. 1960. A population study of the sparrow hawk in east-central Illinois. *Wilson Bull.* 72:222-231.
- Grinnell, J., and A. H. Miller. 1944. The distribution of the birds of California. *Pac. Coast Avifauna* No. 27. 608pp.
- Mills, G. S. 1976. American kestrel sex ratios and habitat separation. *Auk* 93:740-748.
- Roest, A. I. 1957. Notes on the American sparrow hawk. *Auk* 74:1-19.
- Thomas, J. W., ed. 1979. Wildlife habitats in managed forests: The Blue Mountains of Oregon and Washington. *U.S. Dept. Agric., For. Serv., Portland, OR. Agric. Handb. No.* 553. 512pp.